(224) and their use and application is easily distributed automatically to interested parties i.e. users have been screened into specialized categories such as cancer related issues. These authorized users include registered hospitals, medical clinics, and the offices of general practitioners with the distribution of this data via DBS, fiber optics, coaxial cable, or telephone cabling (212). Typical data such as this likely contain images, so the data is compressed to permit the distribution of video images and to minimize the communication link charges. Other typical types of information include data pertaining to new prothesis components, literature relating to new/changes to medical coverage insurance plans, changes to legal/governmental medical policy, etc. The regional library becomes a centre for the dissemination of all medical related information. This encourages the expansion and use of the overall medical network system.

The regional library contains software authoring tools (Video for Windows*, Actionmedia II*, Indeo*, Adobe*, Quicktime*, etc.) to allow the production of medical educational and training materials. Hardware to generate CD-ROM masters (214) to assist in the distribution of this training material is also available. This is extremely important with respect to the association between the regional library, the offices of the general practitioners, medical clinics, lobbies of hospitals, and other medical facilities. A medical diagnostic node (information kiosk) (216) is to be established at each location consisting of a PC, a monitor, and a CD-ROM player. Through an interactive menu, an interested user scans through a database to conduct a preliminary self diagnosis, obtain information on specific drugs, their application and any potential effects, nutrition and dietary data, etc. The intent is to make the user more informed as to their own medical problems and related health care. To complement this capability, a phone in line known as HealthTel (218), is staffed by expert medical personnel to assist in further diagnosis or for the general dissemination of medical information.

In association with the regional library (not necessarily at the same location) is a centralized warehouse for the distribution of all medical supplies or consumables. This warehouse (220) is linked with the hospitals' master libraries or an organization's overall inventory control system to automatically order, distribute, and invoice for the requested medical merchandise. This is effected through the use of standard Electronic Data Interchange (EDI) file formats for order forms, invoices, etc.

The regional library also contains a maintenance diagnostic centre (222). From this facility a maintenance technician is capable of accessing any hospital master library and indirectly any PCS unit, and invoke the running of maintenance diagnostics. Thus from a remote facility, equipment servicing is accomplished to assist local maintenance personnel in the diagnosis of equipment failures.

Thus it is apparent that there has been provided in accordance with the invention that fully satisfies the objects, aims and advantages set forth above. While the invention has been described in conjunction with specific embodiments thereof, it is evident that many alternatives, modifications and variations will be apparent to those skilled in the art in light of the foregoing description. Accordingly, it is intended to embrace all such alternatives, modifications and variations as fall within the spirit and broad scope of the invention.

What we claim as our invention:

1. An electronic information system for distribution of medical information and patient services comprising:

(a) a data source in the form of a Master Library (ML) storing data in digital compressed format, the ML being adapted to store unprocessed or digitally compressed data selected from one or more of the following:
(i) patient/medical staff health record information,
(ii) clinical data including X-Ray, MRI and video images,
(iii) patient laboratory data to support medical diagnoses and investigations,
(iv) educational/training information in video or textual format for the training of medical personnel and patient requirements,
(v) pharmaceutical databases,
(vi) entertainment audio/video data,
(vii) monitored video of critical areas including operating rooms and psychiatric wards,
(viii) general security video monitoring data, and
(ix) management information data including accounting/billing and inventory control/ordering services;

(b) a communications interconnection system electronically associated with the ML;

(c) a computerized nursing station electronically associated with the ML through the internal medical information network for temporary storage of patients' health records that have been accessed and downloaded from the ML, said nursing station operating as a client/server computer system, wherein the server computer is part of the nursing station and the client systems are the interconnected Patient Care Stations (PCS). The nursing station server system containing disk and random access memory (RAM) and the server computer to temporarily store health records for patients interfaced to this station;

(d) an electronic PCS comprising client computers located at each patient bedside communicating with the nursing station server system, said client computers each comprising a central processing unit with associated memory and the following items:
(i) a monitor screen for display of normal NTSC video, RGB video and other interfaced/non-interlaced digital video formats;
(ii) interface means to electronically communicate through the communications interconnection system with the ML and with the nursing station;
(iii) a wireless/IR transmitter/receiver to communicate with a pen based computer device (Personal Data Assistant or PDA);
(iv) an input entry device to facilitate the patient/medical staff communication within the system;
(v) compression and decompression means for data passed to and from the patient care station; and
(vi) application software supplying patient and medical staff services.

2. A system according to claim **1** wherein the computerized nursing station is further provided with decompression means to process any data received from the ML and compression means for processing any data to be transmitted to the ML.

3. A system according to claim **1** wherein the monitor is a unit selected from the group comprising a cathode ray tube, and computer display panels.

4. A system according to claim **1** wherein the communications interconnection system is provided with a cable switched voice means to interface between the patient and a public telephone network.

5. A system according to claim **1** provided with data storage, search, and retrieval implemented through an interactive software means allowing the user to search the ML databases and retrieve data based on user defined search criteria.